# ON A COLLECTION- OF BIRDS FROM THE TIMORLAUT ISLANDS.

#### BY ERNST HARTERT.

THE absence of most of the birds from the Tenimber or Timorlaut Islands was often felt when Mr. Rothschild and I were studying the various forms from the Eastern Archipelago, and therefore it was suggested to Mr. Heinrich Kühn that he should visit these islands to collect birds and lepidoptera. He accordingly spent the end of the year 1900 and the first two months of 1901 on the islands, mostly on the island of Larat, and collected four hundred birdskins and three nests with eggs. The following notes from one of his letters may be of interest:—

"The Tenimber Islands are very thickly populated, and accordingly very much of the soil is under culture. Especially Yamdena, the large central island, where I travelled as far as Aroe, in the middle of the south side, is planted with cocoannt palms until far into the interior, while the rest is mostly covered with plantations of maize and red rice, and some places with indigo and cotton wool for home use. The natives are of a very light chocolate-brown colour, and unfortunately very fond of fighting. There are nearly always some petty wars between the various villages and islands. The natives are rather unfriendly towards any strangers. In Yamdena I was not able to go into the interior. The posthonder declined all responsibility. I was, however, busy collecting insects on Yamdena whenever I landed, and was always on the look-out for birds. Of the latter I found only two which I did not get on Larat, i.e. a Kingfisher \* in the swamps on the north side, and Mrs. Forbes' Honey-eater (Myzomcla annabellae), which I saw only there. I must have obtained most of the birds occurring on the islands. On some of the outlying islands, however, the white Pigeon (Myristicivora), and a black Pigeon with white annulations are said to occur. Occasionally, as on the Key Islands, a Pelican appears, probably as a straggler from Australia. I saw myself, but could not get a shot at, the following species: The two usual Sea-Eagles (Cuncuma leucogaster and Pandion haliaëtus leucocephalus), Haliastur indus girrenera, a Swallow, a huge black Heron, a white Heron, and Ardea sacra. Grancalus melanops, called 'burung barat' by the natives, is also said to ocenr."

It will be seen from the following list that Mr. Kühn obtained nearly all the birds which are peculiar to the Tenimber group. He only missed Strix sororcula, Rhipidura hamadryas, and Graucalus timorlaoensis. The absence of the first is a great pity; the second, however, is fortunately represented in the Tring Museum by a skin obtained by Doherty during a few days' stay in 1897. With regard to the last I think it must be a local form of G. hypoleucus. A series of it would be most desirable.

Of nearly all the resident birds Mr. Kühn sent good series, although, unfortunately, the majority of the birds were in very worn plumage or moulting

<sup>\*</sup> Aleyone azurea yamdenae Rothsch.

during the time Mr. Kühn collected on the islands. Several species sent by Kühn gave opportunities for discussion and characterising of the various subspecies. Mr. Rothschild described as a new form the little Kingfisher from Yamdena, I separated the Dicrurus, which had hitherto been mistaken for D. bractcatus, and the western form of Rallina tricolor. The Corcus necessitated a lengthy discussion, as it had hitherto been mostly mistaken for allied forms. Of Georichla machiki only one was obtained, but of Georichla schistacea a series of five came. A few well-known forms are now sent for the first time from the islands.

The following literature on the birds of the group should be consulted:-

1883: Sclater, *Proc. Zool. Soc.* pp. 48—58, pl. XI—XIV. (List of fifty-four species, description of fifteen new forms, five of which are figured.)

1883: Sclater, t.c. pp. 194-200, pl. XXVI.-XXVIII. (Five new forms described.)

1283: Forbes, t.e., pp. 588, 589, pl. LH., LHI. (Description of Geocichla machiki.)

1884: A. B. Meyer, Zeitschr. ges. Orn. I. pp. 193—218, pl. VIII., IX. (Description of "Sauropatis australasiae var. minor," Graucalus timorlaoënsis, Corvus latirostris, Geocichla schistacea, Macropygia timorlaoënsis, "Stigmatops salvadorii.")

1884: A. B. Meyer, Abh. Isis, Dresden, pp. 5-64. (Five forms described as new.)

1884: Forbes, *Proc. Zool. Soc. Lond.* pp. 425—434. (Remarks on Dr. Meyer's last-named paper and list of Tenimber Birds.)

1886: Büttikofer, Notes Leyden Mus. VIII. pp. 58-68. (Description of Erythromyias riedeli, discussion on Corvus, etc.)

1885: Forbes, Naturalist's Wanderings in the Eastern Archipelago, pp. 355-368, plate. (List of eighty species from the Tenimber Islands.)

In order to facilitate comparison I have in the main followed the arrangement of this last list, though I do not much approve it.

To Dr. H. O. Forbes is due the first ornithological exploration of the group, and most of the forms peculiar to it have been discovered by him and his men. The collections discussed by Dr. A. B. Meyer and Mr. Büttikofer were sent home by Dr. Riedel, formerly Resident of Amboina. They were made by well-trained natives in Dr. Riedel's employ, and have added considerably to our knowledge of the avifauna of these islands.

The present collections made by Mr. Külin add again a little to our knowledge, and it is probable that a few more novelties may yet be picked up in the interior of Yamdena and Selaru.

A good map of the islands is to be found opposite page 415 in Dr. Forbes' book.

## 1. Astur polionotus Salvad.

One female (erroneously marked male) from Larat. It agrees with the skins from Dammer and Banda (cf. Nov. Zool. 1900, pp. 20 and 551). A very good character to distinguish this form from its very near ally albiventris from the Key Islands, is the very conspicuous barring to the median rectrices. These bars are hardly ever indicated in albiventris. "Iris chromeous, feet oehreous, bill black with chromeous cere."

## 2. Cerchneis moluccensis occidentalis Mey. & Wigl.

Three males from Larat belong to the western subspecies of the Molnccan Kestrel. Meyer and Wiglesworth, in their Birds of Celebes, suspect that the Tenimber form may be a hidden subspecies. It is true that the spots on the upperside are somewhat small, but specimens from Flores and Djampea are perfectly similar.

#### 3. Ninox forbesi Scl.

Six fine skins from Larat. The sexes are perfectly alike, if the sexing is correct. "Iris sulphureous or chromeous, feet bright or pale chromeous, bill light grey."

This owl is closely allied to *Ninox hantu* and *Ninox natulis*. The former differs in the less white abdomen and less distinctly barred remiges, the latter in the bars of the under-surface being continued up to the throat.

## 4. Eos reticulata (S. Müll.).

A beautiful series from Larat. "Bill blood-red, more yellowish on the tip; iris brown in various shades; feet black." The young bird, which does not seem to be described yet, differs from the adult as follows: The feathers of the breast have more or less wide black-blue tips; most of the wing-coverts have black margins or tips; the blue on the mantle and nape appears less in stripes, but more like spots, the feathers there being shorter and less attenuated; and their bases are also more blackish grey than in the adult birds.

In former numbers of Novitates Zoologicae I have stated that Eos reticulata was sent by Mr. Kühn from Toeal on Little Key, and from Dammer in the Banda Sea. Mr. Kühn now writes that it was apparently introduced to both Dammer and the Key group, and that the Tenimber Islands are its sole natural home. The sexes of this Lory are alike.

# 5. Cacatua goffini Finsch.

A beautiful series from Larat. The iris is marked on all the labels as "dark coffee-brown," not as red (cf. Cat. B. XX. p. 129).

# 6. Tanygnathus subaffinis Scl.

This form differs from affinis, which looks much like it at a glanee, as follows: The mantle has only faintly indicated, if any, blue edges to the feathers; the rump is only tinged with very pale blue, instead of bright blue; the middle row of wing-coverts is not so bright and blackish; the yellow edges to the rest of the wing-coverts are less golden-yellow. "The iris is yellowish white, feet blackish, bill red."

There is a series from Larat, and one male from Yamdena Island.

# 7. Eclectus riedeli A. B. Meyer.

Four males and two females from various parts of Larat (Ridool and central portion). The females have the tips to the rectrices very wide (about 35 mm.), and of

a bright yellow; the under tail-coverts are bright yellow. Above, the head and neck are of a much lighter red than the back, rump, wing-coverts and scapulars. Onter webs and adjoining portions of inner webs deep blue from above; inner portion of inner webs black from above; primaries entirely black from below. The secondaries have a distinct green area between the red and the blue tips; the innermost long secondaries are not entirely red, but have a large amount of green on the inner webs. "Iris whitish yellow, bill and feet blackish." The males are so well described in Cat. B. Brit. Mus. XX. p. 396, that I have nothing to add.

With this species the genus *Eclectus* is completed in the Tring Museum, all the known forms being represented by good series. Of *Eclectus cornelia* we have made known the "habitat," but of *E. westermanni* we have so far only specimens which came to Europe alive, and the home of this form is still unknown!

#### 8. Geoffroyus personatus timorlaoënsis A. B. Meyer.

A large series from Larat. The wings of the three adult males not in moult measure 173 to 178 mm. This form is thus considerably smaller than Ge. pers. capistratus = keyensis, which it resembles most (cf. anteà p. 84).

#### 9. Halcyon chloris Bodd.

A large form with large beak was found in numbers at Larat.

## 10. Halcyon australasiae minor A. B. Meyer.

Two from Larat, one from Yamdena. This form differs from *H. australasiae* anstralasiae in its much smaller size and paler under-surface. In adult birds the abdomen is not white, but of a pale rust-colour. The wings of the specimens before me measure as follow: ♂ 75, ♂ 78, ♀ 75 mm. Bill from nostril 29 to 32 mm.

Haleyon australasiae is thus known to us in three races:

11. australasiae australasiae: Lombok to Timor and Wetter.

II. australasiae dammeriana: Dammer in the Banda Sea.

II. australasiae minor: Timorlant Islands.

I have seen no Wetter specimens.

# 11. Alcyone azurea yamdenae Rothsch.

One male of an Alcyone was obtained on Yamdena Island on January 30th, 1901. It belongs to the azurea group, and is evidently nearest to Alcyone azurea pulchra from North Queensland. The purplish-blue colour of the sides of the chest extends down to the flanks, and the ultramarine-blue of the upperside is of the same tint as in pulchra. The wing is still shorter than in pulchra; the bill has a distinctly reddish-brown tip. In this latter character this form resembles A. azurea affinis, which, however, has a much stronger bill with a brighter red tip, is larger and more blue above. Mr. Walter Rothschild described the Tenimber form as A. azurea yamdenae at the May meeting of the Brit. Orn. Club, 1901. Mr. Kühn marks the iris as "brownish-black, feet bright coral-red, bill black with a brownish tip." The wing is 71 mm., tail 30 mm., bill from base at forchead 48 mm.

#### 12. Eurystomus orientalis australis Sw.

3, 9, Larat.

## 13. Scythrops novaehollandiae Lath.

One male from Larat.

## 14. Chalcococcyx crassirostris Salvad.

One adult *male* from Larat, shot on February 18th, 1901, in moult, agrees perfectly with specimens from the Key Islands, which seem to be the same as the Amboina form, and which are Salvadori's *crassirostris*.

#### 15. Caprimulgus macrurus Horsf.

One female from Yamdena, 8.1.1901.

#### 16. Heteranax mundus (Scl.).

See Nov. Zool. VII. p. 14, where the sexes are described. We have now received a series from Larat, and one from Selaru. They confirm my description of the adult male and female and young.

#### 17. Monarcha castus Sel.

The male is described and figured by Sclater in P.Z.S. 1883, pp. 51, 53, Pl. XII. The apparently adult female differs in having the throat white, with black bases to the feathers; the black forehead is connected by a black line with the black nape; the back is deep brownish black instead of pure black; the wing is about 3 or 4 mm. shorter. What appears to be the young in both sexes has the head and neck above slaty grey, lores utmost, forehead, feathers round eyes whitish, rest of upperside dark brown, tips to tail-coverts rusty brown, remiges with rufous edges, under-surface white, washed with a brownish rust-colour.

The nearest known ally to *M. castus* seems to be *M. buruensis*, the *male* of which differs in less wide white tips to the rectrices, longer and more widely white feathers in the centre of the throat, and some other minor differences.

We received skins from Larat (Kühn) and Selaru (Doherty).

## 18. Monarcha nitidus (Gould).

A series of males and females from Larat. "Iris blackish-brown."

It would be surprising to find on the Tenimber Islands the same form as in Australia. Our Australian material of *nitidus* being rather poor at present, I do not like to bestow a name on the Tenimber form already; but it seems that it has a longer bill, and that the back of the *female* is of a darker rufous.

#### 19. Monarcha inornatus kisserensis A. B. Meyer.

A series from Larat (Kühn), Yamdena (Kühn), and Selaru (Doherty) agrees with those from Dammer, which are all very deep rufous and paler grey on the head, chest and upper-surface than usual, and seem to be the same as Meyer's kisserensis. See Nov. Zool. VII. p. 14.

#### 20. Rhipidura fuscorufa Sel.

We have a number from Larat (Kühn) and from Sclarn (Doherty), also one from Babber (Schädler), which are perfectly similar. The young has the mandible light, the legs pale, the whole tail rufous, breast, chest and throat rusty buff. It is spotted on the back, and has a wide superciliary line of buff spots.

## 21. Rhipidura hamadryas Sel.

We have received only one skin from Larat, from Doherty.

## 22. Rhipidura opistherythra Scl.

We received a good series of six from Larat. The iris is brown. A nest was found on January 13th. The two eggs are eream-coloured, with a ring of rusty brown and pale ashy grey spots near the thick end, and a few small scattered spots elsewhere. They measure 18.5: 14.2 and 19: 14.5.

This species is rather peculiarly placed and diagnosed in Dr. Büttikofer's most useful review of the genus *Rhipidura* in vol. XV. of the *Notes of the Leyden Museum*. It has nothing to do with *phoenicura*. It is more allied to the *rufidorsa* group and to my *superflua* from Burn, but it has no black pectoral patch, and the tail is entirely dull cinnamon with bright crimson edges, without light apical patches.

# 23. Myiagra fulviventris Sel.

This very distinct form has been sent from Larat, Yamdena and Selaru. The female does not differ obviously from the male, but its wing is 2 or 3 mm. shorter and the under-surface a shade paler. "Iris blackish-brown, feet greyish-black, bill dark bluish-grey with black tip.

# 24. Erythromyias dumetoria riedeli Büttik.

This bird has been received from Larat only.

The description of Dr. Büttikofer (*Not. Leyd. Mus.* VIII. p. 62) has been taken from an immature *male*, for the entire upper-surface of the adult *male* is above pure black, and the tail is black, the two centre rectrices entirely, the rest white for the basal half. The markings on the wing are pure white. There is thus hardly any difference from *dumetoria*.

We have eleven males, but, curiously enough, no female. "Iris of the darkest brown, feet pale plumbeous, bill black." Wing about 66 to 68 mm. This form is

very closely allied to Erythr. dumetoria dumetoria, from which it may perhaps differ by a generally lighter upper throat, slightly narrower white line on the forehead, and apparently darker feet and legs. The two first peculiarities are, however, perhaps due to the abraded state of the plumage of all our Timorlant specimens; while our typical dumetoria from Lombok, Flores and Sumbawa are in fresh plumage. It remains thus somewhat doubtful whether "riedeli" can be separated even as a subspecies!

#### 25. Microeca hemixantha Scl.

From Larat only. "Iris blackish brown; feet blackish; bill black, lower mandible pale."

#### 26. Gerygone dorsalis Scl.

Larat, Yamdena, and Selarn. "Iris dark grey, feet ashy grey, bill black."

#### 27. Graucalus melanops (Lath.).

This bird has been mentioned as occurring in Timorlaut by Sclater, Forbes and Büttikofer; and Mr. Kühn, in one of his letters, says that it occurs in Larat, although he procured no specimens.

Dr. A. B. Meyer has (Zeitschr. gcs. Orn. I. p. 199, pl. IX. fig. 1) described and figured a Graucalus timorlaoensis, which seems to be a form of G. hypoleucus. We have not received specimens of Dr. Meyer's form, which is apparently unique in the Dresden Museum.

#### 28. Graucalus unimodus Sel.

One adult *male*, two adult *females*, and two immature *males* from Larat. "Iris in both sexes of a very deep brown, bill and feet black."

This form of Graucalus (I do not separate the genera Graucalus and Artamides) is as different from Grauc. caeruleogriseus, with which Dr. Sclater compared it when describing it, as any Graucalus can be from another. Its nearest ally is Graucalus pollens Salvad. from the Key Islands, of which it may be considered a subspecies. It differs from G. pollens, besides some minor, very slight differences in shades of colour, in having grey, not black, under tail-coverts in both sexes. The black under tail-coverts in both sexes of G. pollens are very characteristic, although, I believe, not mentioned in any description before.

# 29. Lalage moesta Scl.

Nine skins from Larat. This species is nearest to *L. atrovirens*, from which it differs, besides some minor characters, in having a white superciliary line from the forehead to the eye. There are also generally indications of a continuation of this white line behind the eye. "Iris dark brown, bill and feet black."

If our specimens are correctly "sexed," there is no difference between the sexes.

#### 30. Edoliosoma dispar Salvad.

One male from Larat. Agrees with specimens from Key, Dammer and Banda.

#### 31. Artamus leucorhynchus musschenbroeki A. B. Meyer.

I am not prepared to unite the Timorlaut Artamus straightway with A. leucorhynchus. It is true that the alleged white tips to the rectrices are not a distintinguishing feature. They are found in many individuals from other countries, and most regular and constant in the typical leucorhynchus from the Philippines. The darker colour of musschenbroeki is evident in all Timorlaut examples, though it can occasionally, after much search, be matched in specimens from other places—for example from the Moluccas. The rather large, high bill, however, seems a good distinguishing character. It is developed in the whole series (ten from Larat) before me, and there are only a few from other places (Alor and South Flores) that have equally high bills. Altogether the size of the bill varies considerably in all localities; but it is quite possible that there is a large-billed race on some of the eastern islands. In that case there would be three races, namely:

Artamus leucorhynchus leucorhynchus: Philippines and most of the castern islands. (Bill median.)

Artamus leucorhynchus musschenbroeki: Tenimber Islands, and perhaps some other islands. (Bill large, higher.)

Artamus leucorhynchus leucopygialis: North Anstralia, and perhaps parts of Southern New Gninea. (Bill smaller.) This is the form which I named A. leuc. parvirostris, but I think Gould's name leucopygialis should be used for it. (Cf. also Zeitschr. f. ges. Orn. III. p. 18, 1886.)

#### 32. Dicrurus kühni nov.

The Timorlant Drongo has been hitherto erroneously united with *Dicrurus bracteatus* of New Guinea and Australia. It differs widely from *bracteatus*, having a much more curved and less ridged bill, longer tail, and no large, dall, glossless black unspotted area on the mantle. *D. kühni*, as I name the Tenimber form, is, in fact, more closely allied to the Key form (*D. megalornis*), from which it differs merely by its more curved, less thick and high beak, and smaller size. Its iris is red, feet and bill black. The wing measures in the *males* 155 to 162 mm., in the *females* 140 to 145 mm.; the tail about 165 mm., culmen (over the curve) about 143 mm., metatarsus 26 to 28 mm.

Mr. II. Kühn sent us six skins from Larat, most of them, unfortunately, much worn.

This form and a number of others will, of course, better be treated as subspecies of one species; but I have not time at present to work out the relations of these forms to each other.

## 33. Pachycephala fuscoflava Scl.

A beautiful series from Larat and Yamdena. Sclater at first figured and described only a young male and female. The adult male is below entirely yellow, with a

black pectoral crescent, and has been described by A. B. Meyer (Sitzber. Isis 1884, p. 35); but already in the year before it was beautifully figured in the P.Z.S. Mr. Kühn marks the iris of the male as "a dark brownish red," that of the female as "blackish brown." The feet are "blackish plumbeons, the bill black."

#### 34. Pachycephala arctitorquis Sel.

Sclater and Forbes were correct in describing and figuring the sexes of this species. What Dr. Meyer described as the female of arctitorquis is evidently an immature male, while his riedeli is the adult female of arctitorquis. Mr. Kühn sent us twenty-four skins in all stages from Larat and Yamdena, Doherty a pair from Sclaru. The young bird in first plumage is the most rufous one, being almost dull cinnamon above; the wing-coverts and edges to the remiges brightest; the bill not black, but brownish. Whether Meyer's kebirensis is also identical with arctitorquis is not yet certain, but most probable, judging from the author's description and the distribution of arctitorquis to Dammer.

#### 35. Dicaeum fulgidum Scl.

A beautiful series from Larat. "Iris very deep brown." This form is a close ally of *D. heiense*, from which it differs in the colour of the flanks, longer wing and larger bill. *D. fulgidum*, *heiense* and others can only be regarded as subspecies.

#### 36. Myzomela annabellae Scl.

One male from Yamdena (H. Kühn). "Iris black, feet brownish, bill black." One male, Selaru (Doherty).

# 37. Stigmatops squamata salvadorii A. B. Meyer.

There is not the slightest doubt that the Tenimber form is considerably smaller than typical squamata from Koer (Khor), its original locality, and other islands. It is true that the supposed differences in colour (Meyer in Zeitschr. ges. Orn. p. 217) do not exist, but the wings are about 5 mm. shorter and the bill is more gracile. Büttikofer (Notes Leyden Mus. VIII. p. 65) has well shown the smaller size of salvadorii, although he does not admit its value. He did not, however, grasp the fact that the females of these birds are much smaller than the males, and that therefore specimens of the same sex must be compared with each other. He measures the wings of his Koer skins 65 to 75 mm., while Meyer measures his Tenimber ones 61 to 68 mm. These figures agree fairly well with those taken by myself; the smaller ones, 65 and 61, being those of females, the larger ones, 75 and 68, those of males. The bills also differ in bulk.

# 38. Philemon moluccensis timorlaoensis A. B. Meyer.

It is with some hesitation that I name the *Philemon* from the Timorlaut Islands. Sclater and Sharpe (*P.Z.S.* 1883 and Gould's *Birds of New Guinea*) united it with *plumigenis*, though the latter not without hesitation. A. B. Meyer described it as a new species. His distinguishing characters, however, are

erroneous. The shafts of the remiges and rectrices are not different in colour from those of plumigenis. They are quite as dark when freshly moulted, but become equally light brown when old. The light rust-colour on the underside of the wings is the same as in plumigenis, the upperside is certainly not "obscure fulvescens," but rather "brunneo-grisens," or "obscure griseus" as Salvadori says. Salvadori accepts timorlaoensis as a species, but says that he cannot make Meyer's description agree, and finds that there are no differences from plumigenis except the paler head and more gracile beak. The paler head is not correct, as it varies according to age and freshness of plumage. All I can see is that timorlaoensis is in the mean slightly smaller and has a more gracile beak. There is no doubt that moluccensis, plumigenis, and timorlaoensis are subspecifically allied, and perhaps several other forms belong to the same group. We received a good series from Larat.

#### 39. Zosterops griseiventris Scl.

A series from Larat (Kühn), one from Selaru (Doherty). "Iris bright chocolate-brown; bill deep brown, lower mandible flesh-colour, dark near tip; feet bright plumbeous-grey."

Two nests with two and three eggs were found on January 13th and 14th. The nests are the usual sort of *Zosterops*-nests, rather thin and loosely woven, and lined with horsehair. The eggs are of the palest blue, and measure 16.6:12.8, 16.4:13, and 16.6:13 mm.

## 40. Oriolus decipiens (Sel.)

The imitating Oriole from Timorlant is very closely allied to *Oriolus* (or *Mimeta*) buruensis, from which it merely differs by its longer wing, darker, somewhat more brown under-surface, and less developed, less circumscribed black patch on the auricular region. The differences stated to distinguish it from buruensis by Sclater and Sharpe do not exist in our scries, nor in those sent to Dresden by Riedel. Dr. Sclater's type is evidently a young bird. We have received a fine series from Larat. The iris is dark blood-red; feet and bill black.

#### 41. Geocichla machiki Forbes.

One single specimen, of doubtful sex, from Larat, 17. 1. 1901. "Iris dark brown; feet pale ochrous; bill blackish, base of mandible widely pale yellowish."

## 42. Geocichla schistacea A. B. Meyer.

This excellent species has been sent in five specimens, three females and two males, from Larat. The iris is of a deep coffee-brown, the bill black, and the feet pale flesh-colour. The female is perfectly similar to the male.

In Part III. of Seebohm's Monograph of the *Turdidae* this Thrush is placed in a very wrong position. Probably on account of the black and white colours found in all these various forms, it is put among the *wardi*, *sibiriea*, and *pinicola* group, but its real relationships are with the widely different *interpres* group. It resembles,

in fact, Geociehla dohertyi very closely, except that all the chestnut colour is replaced by ashy grey. The sexes in this group are always alike, while in the sibirica group they are widely different. G. dumasi is a close ally of schistacea.

#### 43. Erythrura tricolor forbesi Sharpe.

A fine series from Larat. In quite old males the hinder head and neck is blue, only this colour does not extend over the mantle as it does in *E. tricolor tricolor* from Timor. The female of *forbesi* is much lighter blue on the undersurface. The young is greenish buff below.

## 44. Munia punctulata nisoria (Temm.)

Four males from Larat. All four are remarkably small, the wings reaching from 47 to 49 mm. only. I have, however, specimens from Flores of very different sizes.

#### 45. Calornis crassa Scl.

Seven from Larat. The adult female is like the adult male. What Sharpe described (Cat. B. Brit. Mus. XIII. p. 134) as the adult female is an immature bird.

#### 46. Calornis metallica circumscripta A. B. Meyer.

As I have said before (Nov. Zool. VII. p. 17), the Tenimber (Timorlant) bird must bear the name circumscripta. The name gularis is based on a bird from Mysol (not Morty, as I wrote by mistake), with an exceptionally purple throat, but the Mysol form is like typical metallica, and certainly not like the Timorlant and Dammer bird, which has the upper throat beautiful purple, separated by a green band from the purple chest-patch, a very narrow green neck-band above (narrower than in typical metallica), and a much shorter wing than typical metallica. The birds from Mysol are not, in my opinion, separable from metallica. The notes by Dr. Forbes in Proc. Zool. Soc. 1884 (pp. 429 and 430) and those of Dr. Sharpe are not correct, principally on account of their not having a series from Mysol. C. m. circumscripta is not a bit nearer to inornata (the Schouten Islands subspecies) than to typical metallica, though in the original description it was chiefly compared with that form. They are all local forms of one species.

# 47. Corvus latirostris A. B. Meyer.

The Tenimber crow has been rather unfortunate with regard to its names. Sclater (P. Z. S. 1883. pp. 51, 195, 200) called it Corvus validissimus, but that name refers to a totally different crow with an enormous beak, inhabiting the Moluccan Islands of Batjan, Halmahera and Obi.

A. B. Meyer (Zeitschr. ges. Orn. I. p. 199, 1884) separated the Tenimber bird correctly as Corvus latirostris, but Büttikofer (Notes Leyden Mus. VIII. p. 65, 1886, and XVIII. p. 189, 1897) united it wrongly with C. macrorhynchus. He says that "in no respect can it be distinguished from macrorhynchus," but it

differs conspicuously from the latter. The bill is shorter and stouter and is much more rounded on the culmen, which does not show such a distinct ridge as in macrorhynchus. The nasal plumes cover fully half the length of the upper bill, and thus hide the nostrils entirely. The bases of the feathers of the body-plumage are of a purer and more creamy white without any indication of a greyish tint. A. B. Meyer (l.c.) has stated some of the differences which distinguish latirostris from orru and enca. The feathers of the throat are narrow, pointed, and more or less forked at the tip. The plumage has not much of a purplish gloss, except on the wings and interscapulium. The wings measure from 305 (one female) to 315 and 325 mm. (two males and one female, but the latter is perhaps wrongly sexed). Tails about 180 to 190 mm. The rather long metatarsus 60 to 65 mm. Culmen from base only 55 to 66 mm. 'Iris bluish white, bill and feet black.'"

There is no doubt that many of the Ravens or Crows of the Eastern Archipelago (probably for example macrorhynchus, latirostris, enca, orru, florensis, tenuirostris) will have to be united into one group of subspecies, but it requires more time and study to do this satisfactorily than I can at present afford.

#### 48. Motacilla flava L.

Three males, 7. 1. 1901 and 12. 1. 1901, Larat.

## 49. Pitta vigorsi Gonld.

A large series from Larat. The range of this *Pitta* has been greatly enlarged through the explorations of Heinrich Kühn, but Dr. Riedel's natives had already shot it on the Timorlant Islands.

# 50. Ptilinopus wallacei G. R. Gray.

A large series from Larat. Quite indistinguishable from birds from the Key, Banda, and South-East Islands. "1ris orange red, feet carmine. Bill yellow."

# 51. Ptilinopus xanthogaster (Wagl.).

A series from Larat. I agree with Count Salvadori (Cat. B. XXI. p. 92) that the green tinge on the head and neck denotes young age, and that therefore Dr. A. B. Meyer's "flavorirescens" from Tenimber cannot be separated from xanthogaster.

# 52. Macropygia magna timorlaoensis A. B. Meyer.

A fine series from Larat Island (Kühn), and one from Selaru (Doherty). The females before me are similar to the males. "Metallic purple reflections" are not very apparent on the breast in any of the fourteen examples before me "Iris bluish grey with a pink ring. Feet pale brownish carmine. Bill brown." Cf. Cat. B. XXI. p. 343. This series confirms our view about the position of this form, as expressed anteà, p. 119.

#### 53. Carpophaga concinna Wall.

Four from Larat (Kühn), one from Sclaru (Doherty).

#### 54. Carpophaga rosacea (Temm.).

A series from Larat. "Iris scarlet or blood-red; feet pale carmine; bill slaty grey."

#### 55. Geopelia maugeus (Temm.).

A large series from Larat. "Iris bright blnish grey."

## 56. Chalcophaps chrysochlora (Wagl.).

One adult female from Larat. This species is well known to inhabit the Tenimber group, which is within its area. It is almost certain that the young "Chalcophaps indica" mentioned by Büttikofer (Notes Leyden Mus. VII. p. 67, 1886) as having come from Tenimber, is chrysochlora.

#### 57. Megapodius tenimberensis Scl.

We have received a fine series from Larat and Yamdena, also several pulli. The latter are of an earthy brown, darker on the head and mantle, lighter on the throat and abdomen; the primaries are somewhat mottled, and the wing-coverts and scapulars somewhat irregularly barred. The adult birds have the scantily feathered skin of the neck and sides of the head bright red, the iris dull coffeebrown, legs blackish brown in front, with the back and the tibio-tarsal joint dark vermilion, bill dirty yellow.

#### 58. Numenius phaeopus variegatus (Scop.).

One female, Yamdena Island, 30. 1. 1901.

#### 59. Rallina tricolor victa subsp. nov.

In Nov. Zoot. 1900, p. 22, and again anteà, p. 140, Mr. Rothschild and I have expressed our suspicion that the more western specimens of Rallina tricolor might belong to a separable smaller race. The arrival of equally small specimens from Larat removes all doubts as to the possibility of separating this race. It differs from typical R, tricolor in its smaller size (bill, wings, legs, and feet). The upper surface is also a tinge less olivaceous and more of an ashy slate-colour, and the bars on the abdomen apparently less developed in the mean. Culmen from base 26 to 29, wing 122 ( $\mathcal{P}$ ) to 135 and 138 ( $\mathcal{S}$ ), metatarsus 40 to 44 mm.

Type of Rallina tricolor victa: 3, Larat 18, 12, 1901. "Iris brownish red; feet dull yellowish brown; bill black with green base, dirty green below."

Other specimens of this race are from the Koer group in the South-East Islands and Dammer in the Banda Sea.

#### 60. Nycticorax caledonicus (Gm.).

Five adult birds from Larat.

#### 61. Demiegretta sacra.

One adult male in perfectly white plumage from Lelingloean Island.

#### 62. Fregata ariel Gould.

One male, Yamdena Island, S. 1. 1901.

#### 63. Dendrocygna guttata Schleg.

Male and female from Larat. "Iris dark coffee-brown; feet brownish or rufous black; bill black."

Dr. Forbes (*l.c.*) enumerates eighty species. Of these—in addition to the sixty-three sent—Mr. Kühn observed, but did not shoot, five or six. Probably the snpposed *Sauropatis saneta* were *S. australasiae minor*, so that Dr. Forbes' nos. 16 and 17 would be the same.

Psitteuteles euteles, Ptilinopus lettiensis and Turtur tigrinus have only been taken by Dr. Riedel's natives so far, and it would be well if their occurrence were confirmed.